METHOD FOR PREDICTIVE POWER MANAGEMENT FOR OPERATING A DISK

DRIVE IN A MOBILE DEVICE TO OPTIMIZE POWER USAGE

ABSTRACT OF THE DISCLOSURE

The invention may be embodied in a method for operating a disk drive in a mobile device to optimize power usage. The mobile device may be a hand held computing device such as a personal digital assistant (PDA) or a mobile terminal such as a cellular telephone. Immediately after responding to a disk access command, the disk drive is in first operating mode that consumes a relatively high level of power and may transition to a second operating mode that consumes a relatively low level of power. A transition from the second operating mode to the first operating mode consumes a transition quantity of power. A predictive technique tracks a user's usage pattern and adapts an operating mode transition time based on the usage pattern.